

Heterogeneity of filtration in the upper part of the geologic cross-section in Vostochno-Zakamsky oil region of the Republic of Tatarstan

Musin R., Musina R.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

In Tatarstan continuous oil mining has caused large scale pollution of underground water in upper part of the geological section. As a result, there is the increasing problem of quality drinking water supply in many settlements. In this connection, we examined the nature and major filtration heterogeneity Nizhnekazanskogo aquifer. This is the most productive part of the section on underground water for drinking water. Comprehensive review of a variety of data allowed us to establish five main factors: geological, structural, hypsometric, geomorphological and facial. Their combination forms an increased filtration background of rocks. First of all, results allow to choose optimal position of the new water wells and rational planning and exploration work for the underground drinking water.

Keywords

Coefficient of filtration, Limestones, Oil fields, Sandstones